Water Fluoridation in South Carolina: A Fact Sheet

What's so bad about tooth decay?

Oral health is integral to general health.² Although preventable, tooth decay is a chronic disease affecting people in all age groups. In fact, it is the most common chronic disease of childhood.² The burden of disease is far worse for those who have limited access to prevention and treatment services. Left untreated, tooth decay can cause pain and tooth loss. Among children, untreated decay has been associated with difficulty in eating, sleeping, learning, and proper nutrition.³ Among adults, untreated decay and tooth loss can also have negative effects on an individual's diet and nutritional status, self-esteem and employability.

Why is water fluoridation important?

Adjusting the natural fluoridation level of community drinking water to optimal levels (0.7 to 1.2 parts per million) has repeatedly been shown to be a safe, inexpensive, and extremely effective method of preventing tooth decay. Because community water fluoridation benefits everyone in the community, regardless of age and socioeconomic status, fluoridation provides protection against tooth decay in populations with limited access to prevention services. In fact, for every dollar spent on community water fluoridation, up to \$42 less is spent on treatment costs for tooth decay. The Task Force on Community Preventive Services recently conducted a systematic review of studies of community water fluoridation. The Task Force is a national, independent, nonfederal, multidisciplinary task force appointed by the director of the Centers for Disease Control and Prevention (CDC). They found that, in communities that adjusted community water fluoridation to optimal levels lead to a decrease in childhood decay of up to 30% over 3–12 years of follow-up.

How Is South Carolina Doing?

Ninety-one percent of the population in South Carolina on public water systems received optimally fluoridated water in 2006, and three percent of the population had access to naturally fluoridated water. This translates into 82% of South Carolina's total population receiving fluoridated water, which is above the national goal of 75% and much higher than the national average of 67%.

What Is South Carolina Doing?

South Carolina Drinking Water
Fluoridation Grant Program: This
program provides grants to local public
water systems to assist them in adjusting
natural fluoridation in community drinking
water to optimal levels. Funding for this
program is provided by the Centers for
Disease Control and Prevention.

Related U.S. Healthy People 2010 Objectives⁵

- ✓ Seventy-five of the population on public water will receive optimally fluoridated water.
 - o In South Carolina, 91% of the population on public water receives fluoridated water.
- ✓ Reduce to 20% of adults age 65+ years who have lost all their teeth.
 - o In South Carolina, 22% of adults age 65+ years have lost all of their teeth.
- ✓ Reduce tooth decay experience in children under 9 years old to 42%.
 - o In South Carolina, 52% of children under 9 years old have experienced tooth decay.

To find out if your water is fluoridated, call your water utility, or check this website: http://apps.nccd.cdc.gov/MWF/CountyDataV.asp?State=SC

If you are not on a public water system (that is, if you use a well), call the Bureau of Water (803-896-0860) at DHEC to have your water tested.

For further information on water fluoridation, please consult the following resources:

http://www.cdc.gov/oralhealth/waterfluoridation/index.htm http://apps.nccd.cdc.gov/MWF/CountyDataV.asp?State=SC http://www.dhec.sc.gov/health/mch/oral/index.htm

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References

- 1. Centers for Disease Control and Prevention. Fluoridation of drinking water to prevent dental caries. Morbidity and Mortality Weekly Report 48 (1999): 933-40.
- 2. U.S. Department of Health and Human Services, National Institute of Dental and Craniofacial Research. Oral Health in America: A Report of the Surgeon General. Rockville, MD: U.S. Department of Health and Human Services, National Institute of Dental and Craniofacial Research, 2000.
- 3. Truman BI, Gooch BF, Sulemana I, et al., and the Task Force on Community Preventive Services. Reviews of evidence on interventions to reduce dental caries, oral and pharyngeal cancers, and sports-related craniofacial injury. American Journal of Preventive Medicine 23 (2002, 1S): 1–84.

 4. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention. Preventing Dental Caries. Atlanta, GA: U.S. Department of Health and Human Services, Centers
- for Disease Control and Prevention, 2002. https://www.cdc.gov/OralHealth/factsheets/dental_caries.htm.
 5. U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion. Healthy People 2010. Washington, DC: U.S. Department of Health and Human Services,
- Office of Disease Prevention and Health Promotion, 2000. http://www.health.gov/healthypeople.
 Burt BA, Eklund SA. Dentistry, Dental Practice, and the Community (5th ed.). Philadelphia: W.B. Saunders, 1999.

6. South Carolina Department of Health and Environmental Control, http://www.dhec.sc.gov

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